

REDDy SET GROW

Part 2

UNEP

Private sector suggestions for international climate change negotiators Designing an effective regime for financing forest-based climate change mitigation

A study by the UNEP Finance Initiative's Biodiversity and Ecceystems Workstream (BEV Climate Change Working Group (CCWG) Sentember 2011

UNER Finance Initiative Innovative financing for sustainability UNEP Finance Initiative Innovative financing for sustainability

Report Launch Webinar

REDDy-Set-Grow Part II: Private sector suggestions for international climate change negotiators

September 13, 2011



Welcome Remarks



Sébastien Malo

Head of Communications, UNEP Finance Initiative



Andrew Mitchell Global Canopy Programme



UNEP Finance Initiative Innovative financing for sustainability

REDDy-Set-Grow Part II Report Launch Webinar September 13, 2011

Stephen Cornelius Department of Energy and Climate Change, UK



Abyd Karmali Bank of America Merrill Lynch



Ravi Prabhu UN-REDD Programme



Christian del Valle BNP Paribas

Speakers: Morning Session



Andrew Mitchell **Global Canopy Programme**



Andreas Dahl-Jørgensen Ministry of Environment, Norway



Abyd Karmali Bank of America Merrill Lynch



Christian del Valle BNP Paribas

Maria Victoria Chiriboga Ministry of the Environment, Ecuador

Speakers: Afternoon Session



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Setting the Context

JNITED NATIONS ENVIRONMENT PROGRAMME

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Andrew Mitchell

A leading international authority on forests and climate change, Andrew is an impassioned advocate of forest conservation, whose 35 year career spans scientific research, broadcast journalism and environmental policy.

In 2001, he founded the Global Canopy Programme in Oxford, an international network linking academic institutions focused on ecosystem services, policy and innovative finance mechanisms for forests. He launched the Forest Footprint Disclosure Project in 2009, endorsed by institutional investors with over \$5 Trillion of assets under management and The REDD Desk in 2011, a leading on-line knowledge platform on reducing emissions from deforestation. He advises international governments and institutions and was Special Adviser to the Prince of Wales' Rainforests Project.





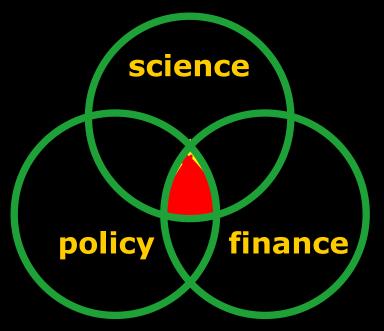
Forests > Change > Thinking

- Wealth creation depends on 'Natural Capital'
- Tropical forests can be valued differently.
- They are 'Eco-Utilities' providing a service.
- Policy and Funding mechanisms are being reset to recognise this.
- This could stimulate a 'Green Economy'.
- 'Ecosystem Services' could make forests worth more alive than dead





EXTERNALITIES





A New Vision for Forests?





Change Driver 1: Climate

"There will be no solution to climate change, without a solution to deforestation" Inter Academy Panel, 2009



Aircraft Emissions = 2% Energy Emissions = 25 % Forest Emissions = 18%

Forest emissions are equivalent to Flying 12.5 million people from London to New York everyday!



McKinsey report, Feb 2009

Abatement

potential

4.0

2.0

1.7

04

0.3

0.5

03

0.5

0.3

0.4

0.3

1.9

0.5

0.9

0.7

0.9

0.2

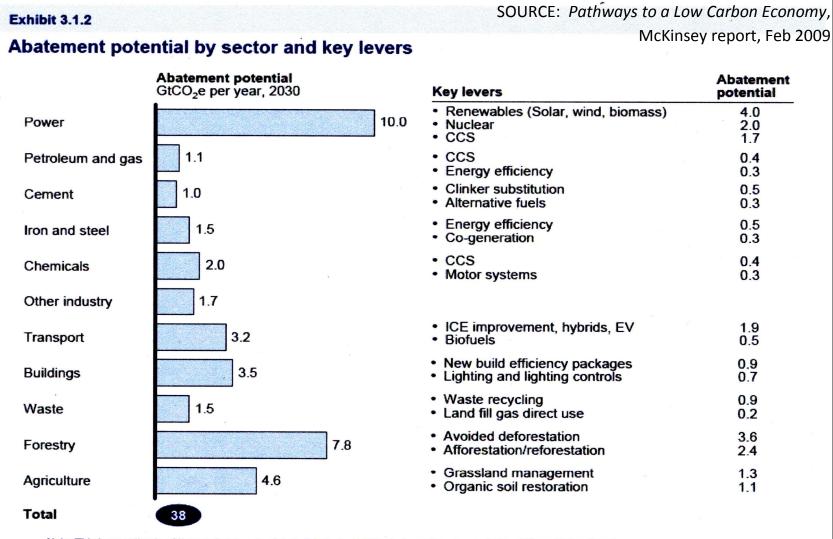
3.6

24

1.3

1.1

Change Driver 1: Climate



Note: This is an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO2e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play. Source: Global GHG Abatement Cost Curve v2.0



Change Driver 2: Carbon

"Its Not Just About Carbon"

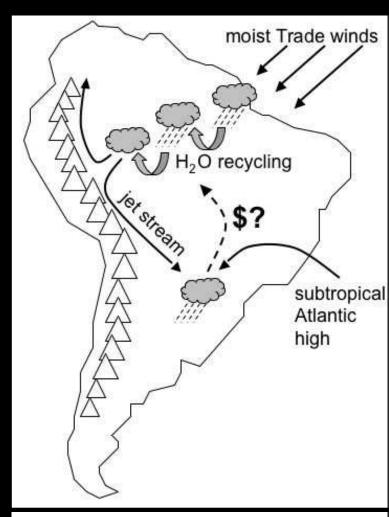
Forests are global 'Eco-Utilities' of immense Value



The Amazon as 'Ecological Infrastructure'

Providing Regional to Global Ecosystem Services

- 3 trillion tonnes of water stored
- 8 trillion tonnes of water vapour evaporated each year?
- \$1 trillion of industry share this eco-dependency
- Deforestation may mean declining service provision
- Rising temperatures may compound the effects



The Amazon's Rainfall Service? After J. Marengo, INPE



Change Driver 3: Demand

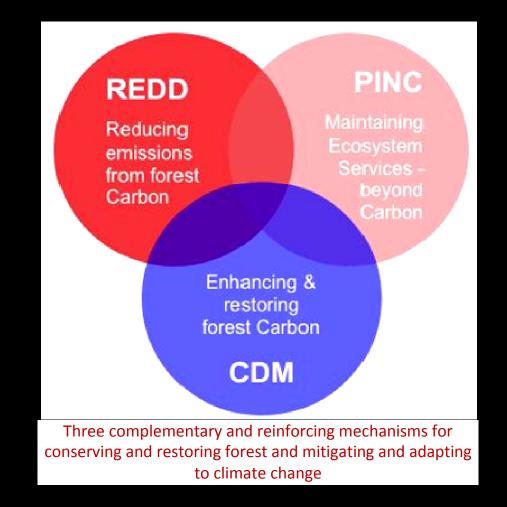
Peak Deforestation & Consumer Awareness

A Changing Risk for Companies especially in mature markets



CDM > REDD > REDD+ > PINC

(Pro-active Investment in Natural Capital)



Tradable Currency = 1t/CO2 > 1 ha/forest?



The Billion Dollar Question

Who Pays & How Much? (\$US 17-33 Billion / yr)

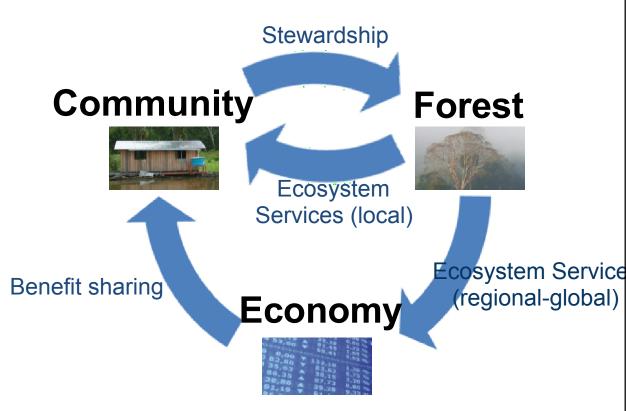
- Carbon is the first service valued
- International Auctioning (AAUs)
- National Auctioning of Allowances
- REDD Offset Markets
- Government ODA / Taxes
- Interim Financing Mechanism \$US 4.2 Bn



Forests a Proxy for 'Green Economy'?

- Food Security
- Energy Security
- Climate Security
- Health Security
- Livelihoods

Amazon Eco-Utility draft framework





Suggestions from the Private Sector



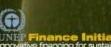
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Abyd Karmali



Abyd Karmali is a Managing Director and Global Head of Carbon Markets at Bank of America Merrill Lynch. His team has won several awards for innovative transactions including Environmental Finance magazine's Carbon Finance Transaction of the Year (2008), The Banker Award for Most Innovative in Sustainability (2008), The Banker Award for Most Innovative in Climate Change (2011), and a Special Commendation for Achievement in Financing at the Base of the Pyramid at the Financial Times' sustainable finance awards (2011) for a deal in sub-Saharan Africa twinning carbon finance with microfinance. He serves on Bank of America's Environmental Council and has worked for two decades on climate change and the carbon markets. He also serves as elected President of the Carbon Markets & Investors Association and Chairman of Just Energy, a new Oxfam initiative focused on access to energy. He holds an M.S. in Technology and Policy from the Massachusetts Institute of Technology.



UNEP Finance Initiative

- A strategic partnership between UNEP and more than 200 financial institutions.
- Recently moved into the 'REDD space'
 - Inform FIs on the opportunities, risks and roles in forest carbon

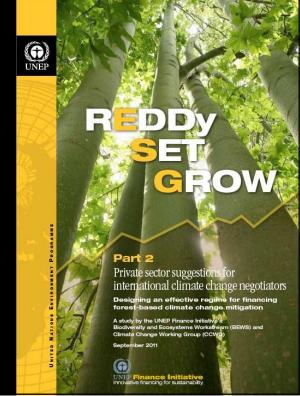
• Work with policy-makers to develop a favorable policy framework that stimulates private sector engagement and investment in forest-based mitigation and leads to shifts in land use behavior by the private sector.



REDDy-Set-Grow

1. Part I informs financial institutions on the current avenues for commercial involvement in forestry-based mitigation, as well as current barriers and risks.

2. Part II recommends to international climate negotiators best policy options to catalyse private investment and engagement into forestry-based mitigation.





Private finance and investment: why?

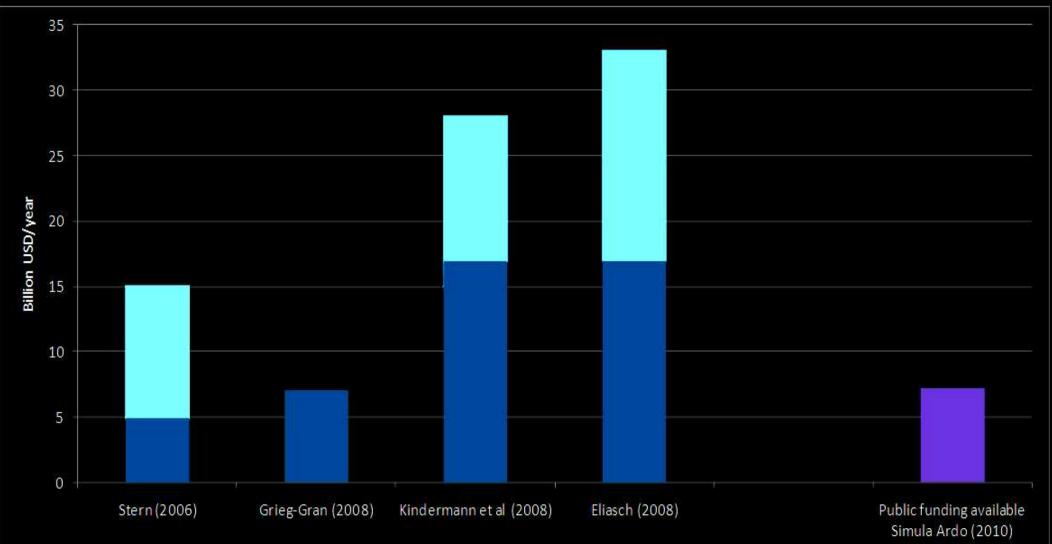
A 50% reduction in deforestation is needed by 2020. If BaU continues, climate change damage to the world economy will amount to approximately USD 1 trillion/year by 2100.

The annual value of all ecosystem services from forests to the global economy has been estimated at approximately USD 5 trillion per year.

Roughly USD 17-40 billion per year is needed to halve emissions from deforestation by 2030.

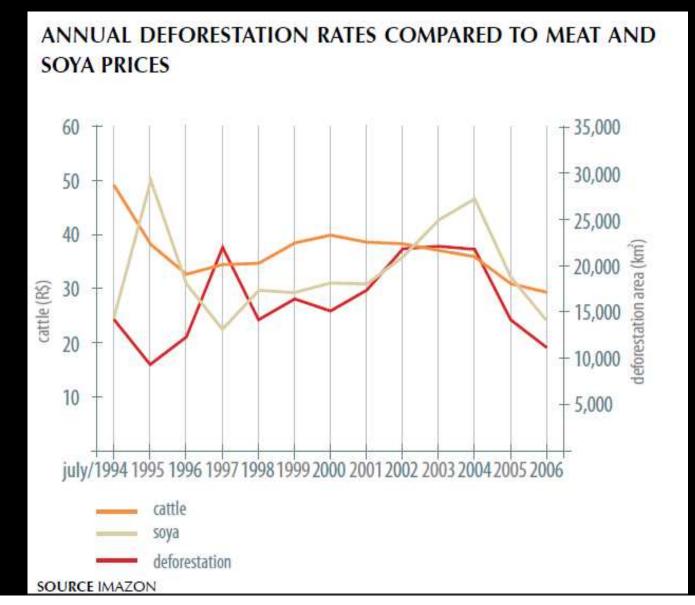
Private investment needs to be part of the solution

if the objectives are to be met at the required scale and speed





Private finance and investment: why?





Private finance and investment: how?

- Considerable progress to date in the UNFCCC on REDD+
- Left open: how will REDD+ implementation be financed?
- Number of scenarios on the table in international climate arena (outlined in this report)
- Important! Not all scenarios stimulate private sector involvement in REDD+ efforts



Christian del Valle



Christian del Valle is Director of Environmental Markets & Forestry with BNP Paribas. Christian joined the bank in 2005 to manage and develop the client base for environmental products, with a focus that included EU-ETS business and global emissions reductions projects (CDM/JI). He is now leading BNP Paribas' movement into the Forest Carbon space, with a particular focus on communitybased REDD+ in Africa and Latin America. Amongst his recent achievements is the execution of one of the first-ever large private sector interventions in REDD+, through the creation of a \$50m financing framework for African forest carbon projects with Wildlife Works. In addition to structuring, origination and business development, Christian's role extends to regulatory affairs, where working through organizations such as International Emissions **Trading Association (IETA) and Carbon Market and Investors** Association (CMIA), he has interfaced extensively with policymakers on both sides of the Atlantic. He serves as the Vice-Chair of CMIA's REDD working group and sits on the project board of the World **Economic Forum's Project on Sustainable Land Use.**



Private finance and investment: how?

- 1. Will there be a global climate change deal?
- 2. Who will make performance-based payments in phase 3?
- 3. Who can receive performance-based payments in phase 3?

Scenario	Perceived effectiveness to mobilise private sector capital
1. National crediting under a UNFCCC agreement	
2. Subnational or project crediting under a UNFCCC agreement	+
3. Nested approach: hybrid solution between scenario 1 and 2	+ +
4. International fund with national-level incentive payments	
5. Voluntary markets only (no global REDD+ agreement under UNFCCC)	+/-



Most promising scenario is the nested approach in scenario 3

- Need to tackle fundamental driver of deforestation by changing behavior of private sector: Need for a positive price signal
- Make performance-based payments directly to public / private implementers of REDD+ activities
- Subnational and regional baselines coexist with all-encompassing national baseline
- Crediting mechanism beats international fund: make carbon emitters pay, not tax payers



Risks and challenges of private sector investment in REDD+ as well as ways forward

- Fungibility?
- Environmental and social safeguards
- Land tenure and ownership rights
- Geographic investment distribution, governance and corruption



Response from Negotiators

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Stephen Cornelius

Stephen Cornelius is Head of Forests and Land-use Negotiations at the UK's Department of Energy and Climate Change. He has worked on international climate change policy for seven years – previously with the UK environment and business ministries. His work has included climate change science, carbon capture and storage, the Intergovernmental Panel on Climate Change and the United Nations Framework Convention on Climate Change negotiations. He currently represents the UK on REDD+ at the UNFCCC and the REDD+ Partnership.





Ravi Prabhu



Ravi Prabhu is currently a Senior Programme Officer, Forests and Climate Change with the United Nations Environment Program (UNEP) in Nairobi. He leads the UNEP team within the UN-REDD Programme. Prior to this Ravi worked for the Collaborative Group for International Agricultural Research (CGIAR) and the Center for International Forestry Research (CIFOR) in various capacities. He has over 20 years of experience in research and policy on forests and natural resources management. He was trained at the University of Goettingen, Germany and the University of Delhi, India. He received the Queen's Award for Forestry at Buckingham Palace in 2005.



Andreas Dahl-Jørgensen



Andreas Dahl-Jørgensen joined the core project team of Norway's International Climate and Forest Initiative as an adviser in 2009. He represents Norway in the Forest Carbon Partnership Facility and the Forest Investment Program and has negotiated REDD+ in the UNFCCC. He co-led the international working group on interim finance for REDD+ prior to Copenhagen summit in 2009, and the work to set up the Interim REDD+ Partnership in 2010. Prior to joining NICFI, Andreas worked on carbon finance at the World Bank. He holds a Master's in International Studies from Johns Hopkins School of Advanced International Studies.



Maria Victoria Chiriboga

Undersecretary of Climate Change, Ministry of the Environment, Ecuador

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Global Roundtable 2011

CONTRACTOR CONTRACTOR

Washington, DC, USA 19-20 October 2011



TIPPING POINT Sustained stability in the next economy

What is the next tipping point ...?

Join world-class experts to hear (and debate) their answers:

Gordon Brown, former Prime Minister of the UK, current MP

Nassim Taleb, author of best-selling book The Black Swan

James Balsillie, co-CEO of Research in Motion and member of the UN High Level Panel for Global Sustainability

Yvo de Boer, former Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) and KPMG Global Advisor on Climate Change and Sustainability.

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